

Wyckoff Eagle Harbor Site



Kick-off meeting
Fourth Five-Year
Review

January 12, 2017



Topics I will cover



- ▶ Brief Site history
- ▶ Operable Units
- ▶ For each Operable Unit
 - Cleanup actions to date
 - Protectiveness Determination from last Five-Year Review
 - Progress over the past 5 Years

Forthcoming ROD

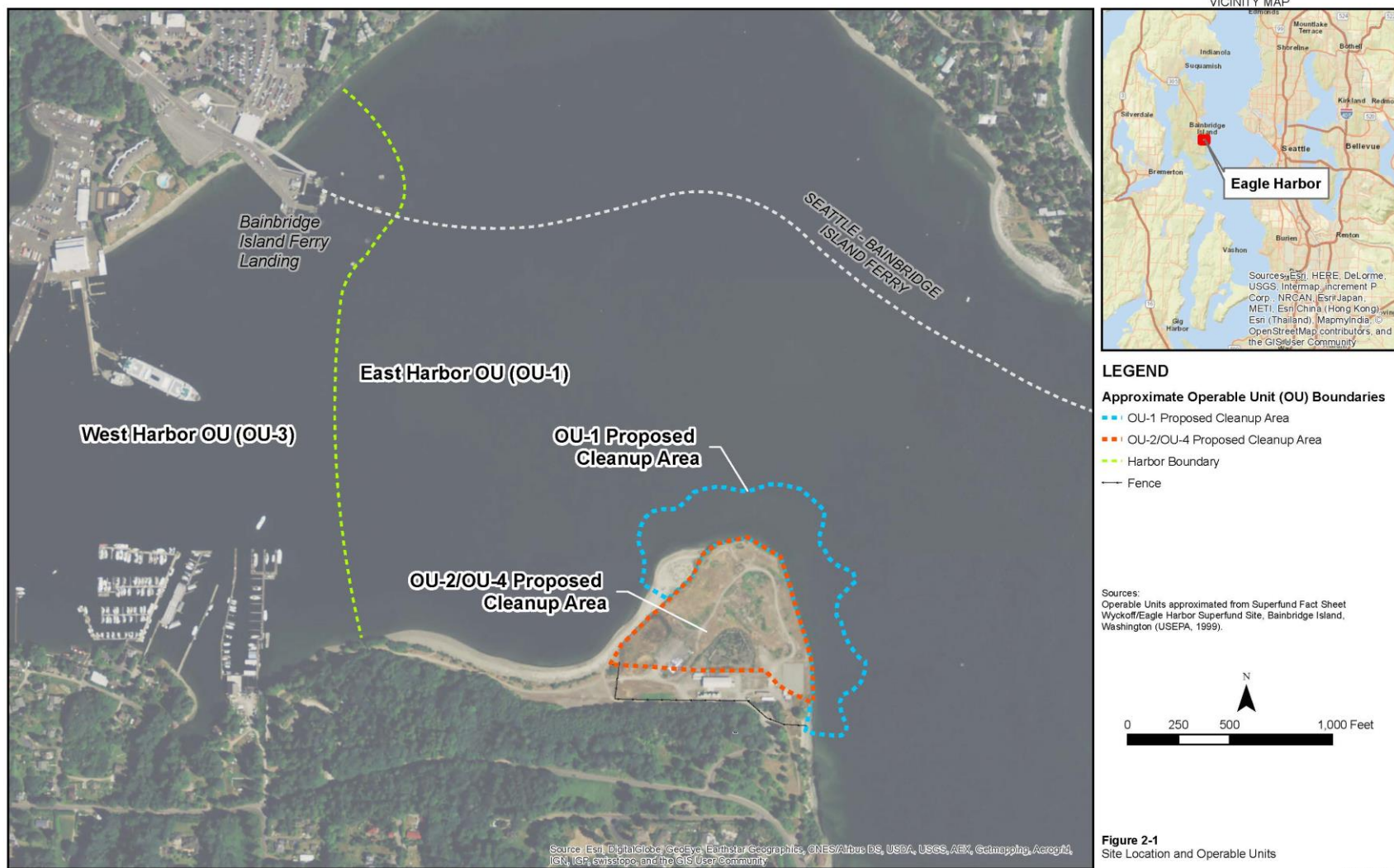


- ▶ April 2016 – EPA issued Proposed Plan for Additional Cleanup actions at the former Wyckoff wood treating facility
- ▶ Public Comment Period ran through June
- ▶ EPA working through public comments received and considering modifications to the proposed remedy
- ▶ Record of Decision to be issued in spring/summer 2017

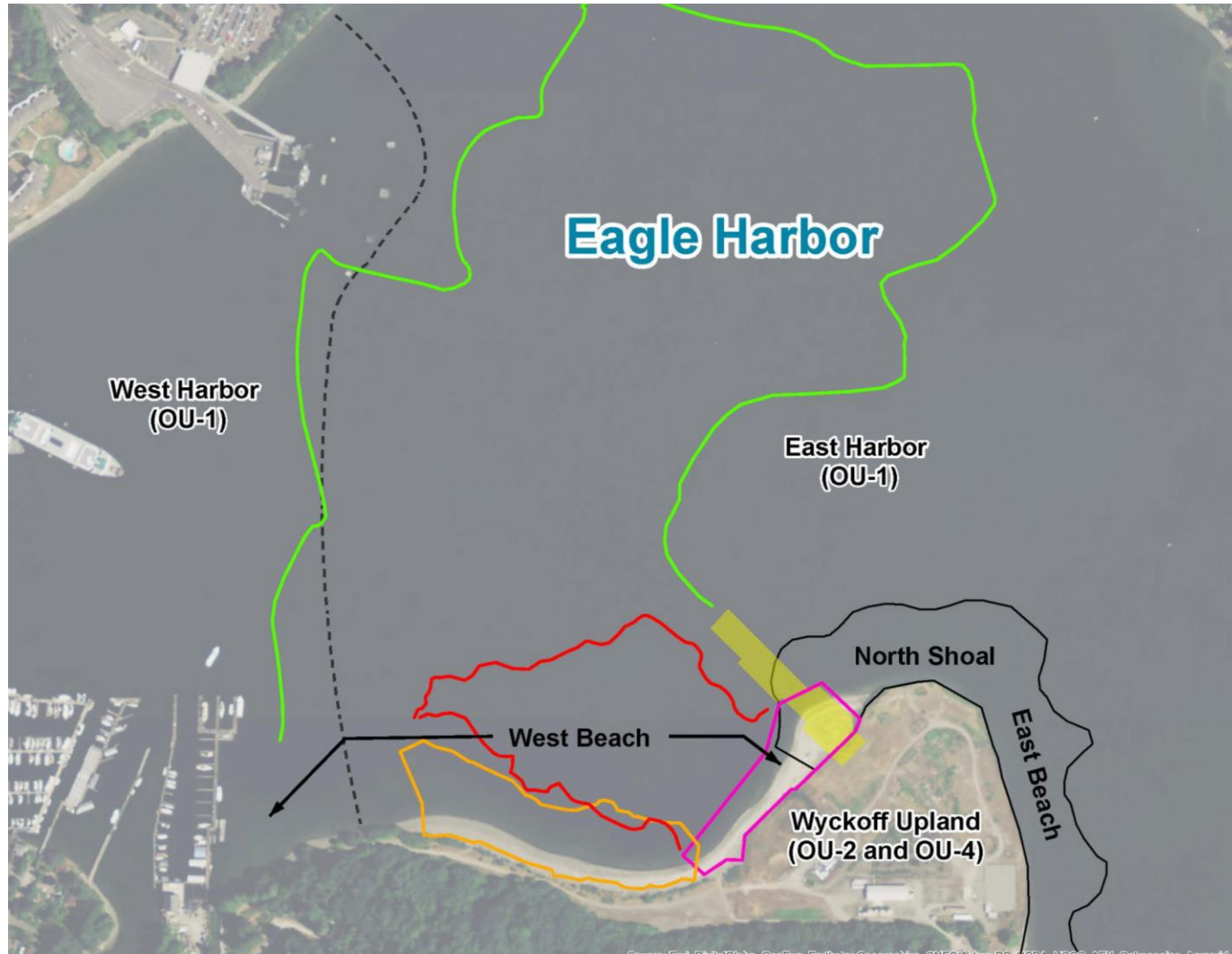
Site History

- ▶ Added to the Superfund list in 1987
- ▶ Contamination found in upland soils and groundwater, and in Eagle Harbor sediments
- ▶ Two primary sources of contamination
 - Wyckoff wood treating facility
 - Former shipyard
- ▶ Site divided into four Operable Units
- ▶ Extensive cleanup actions have already been implemented
- ▶ Last (Third) Five–Year Review completed 2012

Operable Units (OUs)



OU1 Cleanup Actions to Date



OU1: Last Five-Year Review Said

- ▶ The Remedial Action is expected to be protective in the long term when:
 - the subtidal cap within the ferry lane is replaced;
 - grid cell J-9 receives capping material; and
 - natural recovery goals are met on East Beach and North Shoal (or additional actions are taken)
- ▶ Issues: Cap material in the ferry lane and in grid cell J-9, contamination remains in beaches, clam tissue concentrations above risk based levels

OU1: Progress over last 5 years

- ▶ Completed new investigation to determine the extent of NAPL contamination – 2012(?)
- ▶ Measured porewater and surface water concentrations (?)
- ▶ Assessed thickness of EBS cover on West Beach –
- ▶ Sampled clam tissue – 2014 and 2016
- ▶ Issued draft Focused Feasibility Study and Proposed Plan for additional actions – 2016
- ▶ Began repair of sediment cap in ferry lane

OU3: Cleanup Actions to Date

- ▶ Removal, treatment, and disposal offsite of sediments that exceeded Dangerous Waste [DW] criteria;
- ▶ removal and disposal at an onsite confined disposal facility of sediments containing more than 5 mg/kg total mercury;
- ▶ backfilling of dredged areas to pre-existing grade elevations;
- ▶ placement of a thick cap (1 meter) over sediments containing >2.1 mg/kg mercury;
- ▶ placement of a thin cap (15 centimeters) over sediments exceeding chemical or biological cleanup standards; and
- ▶ sediment armoring



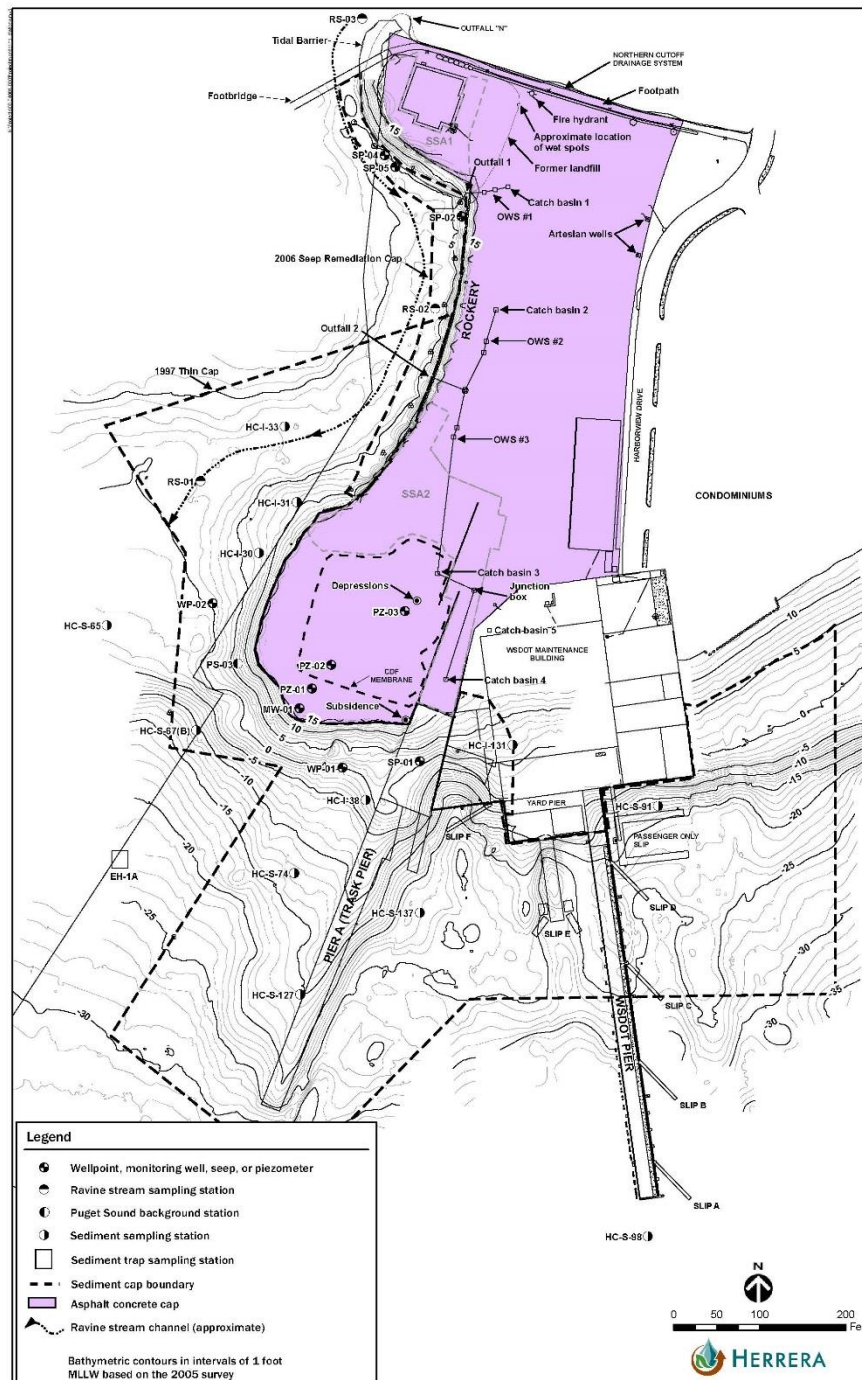


Figure 2. Eagle Harbor WHOU Site Features and Monitoring Stations.

OU3: Last Five-Year Review Said

- ▶ The remedy is protective of human health and the environment
- ▶ Exposure pathways that could result in unacceptable risks are being controlled by the asphalt cap and intertidal barrier system

OU3: Progress over the last 5 years

- ▶ Annual inspections 2012, 2013, 2014, 2015, 2016
- ▶ Repair of subsidence area in 2013
- ▶ Replacement of material covering the geotextile mat on the northern CDF berm in 2013
- ▶ Monitoring of asphalt cap, repairs of cracks
- ▶ CDF loading calculations
- ▶ Stormwater protection program

OU2 / 4 Cleanup Actions to Date

- ▶ Demolition of plant buildings and equipment; removal of wood treating chemicals and grossly contaminated soils
- ▶ Installation of groundwater extraction wells and treatment system
- ▶ Construction of perimeter steel sheet pile wall
- ▶ Pilot test of steam treatment (unsuccessful)
- ▶ Upgrade of groundwater extraction and treatment system

Site History

Wood treating facility 1940s



OU2 /4: Last Five-Year Report Said

- ▶ The remedy is expected to be protective to human health and the environment when the soil cap is constructed and appropriate institutional controls are in place for the anticipated future land use.
- ▶ Exposure pathways are being controlled by fencing, the sheet pile wall, and groundwater treatment system.
- ▶ No one is currently using the groundwater as a drinking water source.

OU2 /4: Progress over last 5 years

- ▶ Continued operation of the groundwater extraction and treatment system by Washington Department of Ecology
- ▶ New investigation of the extent of NAPL contamination
- ▶ Lower Aquifer groundwater monitoring
- ▶ Upper Aquifer groundwater monitoring
- ▶ Draft Focused Feasibility Study and Proposed Plan recommending additional cleanup actions – 2016

Discussion

- ▶ For each Operable Unit (OU1, OU3, OU2/4):
 - Observations on the protectiveness of the existing remedies
 - Data, information, reports to support the review
 - People EPA/USACE should interview
 - Maintenance issues requiring attention
 - Anything else?